

Inventors: Aebersold and Goodlett  
Serial No.: 09/748,793  
Filed: December 26, 2000  
Page 2

31  
C1  
characteristics being mass of a peptide fragment of said polypeptide determined by mass spectrometry;

31  
C1  
(b) comparing said characteristics associated with said polypeptide to an annotated polypeptide index, said annotated polypeptide index comprising at least one empirically determined characteristic for each of the polypeptides in the index; and

(c) identifying one or more polypeptides in said annotated polypeptide index having said characteristics.

31  
C1  
13. (Twice amended) A method for identifying and quantitating a polypeptide, comprising:

31  
C1  
(a) determining two or more characteristics associated with said polypeptide, or a peptide fragment thereof, one of said characteristics being mass of a peptide fragment of said polypeptide determined by mass spectrometry;

32  
(b) comparing said characteristics associated with said polypeptide to an annotated polypeptide index, said annotated polypeptide index comprising at least one empirically determined characteristic for each of the polypeptides in the index;

(c) identifying one or more polypeptides in said annotated polypeptide index having said characteristics; and

Inventors: Aebersold and Goodlett

Serial No.: 09/748,793

Filed: December 26, 2000

Page 3

32  
004  
Sub  
01  
(d) quantitating the amount of said identified polypeptide in a sample containing said polypeptide.

Please add the following new claims.

44. (New) The method of claim 1, wherein at least one of said characteristics is determined by chromatography.

45. (New) The method of claim 44, wherein at least one of said characteristics is determined by ion exchange chromatography.

46. (New) The method of claim 45, wherein at least one of said characteristics is determined by anion exchange chromatography.

47. (New) The method of claim 45, wherein at least one of said characteristics is determined by cation exchange chromatography.

48. (New) The method of claim 44, wherein at least one of said characteristics is determined by gel filtration chromatography.

49. (New) The method of claim 44, wherein at least one of said characteristics is determined by reverse phase chromatography.